5.4 HAZARDS AND HAZARDOUS MATERIALS

The Ponto Area is subject to evaluation for on-site conditions that may represent hazards with respect to human health and safety. The following analysis is based on the Phase I Environmental Site Assessment (ESA) prepared by RBF Consulting in July 2006 to evaluate the potential presence of hazardous materials and the expected nature of the materials that may be within the Ponto Area or that may have entered the site from off-site sources.

The scope of the Phase I ESA follows guidance provided in American Standards for Testing and Materials (ASTM) Standard Practice E 1527-00. The ASTM 1527-00 document outlines a procedure for completing ESAs that includes a review of records (historic aerial photographs, city directories, Sanborn Fire Insurance Rate Maps, report review), site reconnaissance, and interviews where possible. Subsurface exploration, geologic mapping, laboratory testing of soil or water samples, lead and asbestos sampling, and operations/inventory review of adjacent uses were not performed.

As defined in ASTM Standard Practice E 1527-00, a Recognized Environmental Concern (REC) is "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include "de minimis" conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be "de minimis" are not RECs. The ESA is intended to identify such REC's that would potentially affect the Ponto Area.

A "historic recognized environmental condition" (HREC) is defined as a condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. HRECs are generally conditions which have in the past been remediated to the satisfaction of the responsible regulatory agency.

5.4.1 Existing Conditions

On-site roadways include Avenida Encinas (improved roadway; traversing the central portion of the Ponto Area in an east/west direction), Ponto Drive (improved roadway; traversing the site in a north/south direction), and an unnamed roadway (unimproved; traversing the site in a north/south direction). On-site topography is gently sloping and is approximately 30 to 70 feet amsl and slopes to the southwest. No on-site pits, ponds, or lagoons were noted during a topographical map review.

Approximately 24 structures exist in the Ponto Area and include approximately eleven onsite addresses. Structures range from one- to two-story structures in varying degrees of condition. Structures appear to have been constructed of metal, wood, and stucco. Some of the metal structures appear to be rusting.

On-site uses include multiple light industrial uses (including a wood and sheet metal shop, an auto service/storage yard, wood chipping, a salvage yard, heating and air conditioning manufacturer), commercial uses (dog and cat kennel, storage facility, and an upholstery and

antique store), residential uses, and vacant land. Multiple storage areas containing miscellaneous metal debris, plastics, piping, and various solvents, paints, oils, and lubricants were noted throughout the site. Historical uses within the Ponto Area included, but were not limited to, metal shops, paint shops, antique repair, and mirror reconditioning facilities, dipping and stripping operations of materials, auto repair, metal fabrications, agricultural activities, and the San Diego Northern Railroad (SDNR).

The direction of groundwater flow on-site is expected to be generally in a southwesterly direction. According to the Environmental Data Resources (EDR) Database search, no water wells are located within the boundaries of the subject site. Depth to ground water is reported at approximately 50 feet below ground surface (bgs).

The ESA determined through a review of historical aerial photographs, among other sources, that the Ponto Area historically supported agricultural uses during the 1950's and 1960's. As such, the uses of pesticides or other similar substances may have been utilized on the site.

5.4.1.1 Visual Site Survey

RBF performed a site visit on July 5, 2006 consisting of a visual examination of the subject site for evidence of potential environmental concerns. The Ponto Area was inspected for existing or potential soil and groundwater contamination (as evidenced by soil or pavement staining or discoloration); stressed vegetation; indications of waste dumping or burial; pits, ponds, or lagoons; containers of hazardous substances or petroleum products; electrical and hydraulic equipment that may contain Polychlorinated Biphenyls (PCB)s, such as electrical transformers and hydraulic hoists; and, underground and aboveground storage tanks.

5.4.1.2 Hazardous Materials

The presence of hazardous materials in the Ponto Area that may have been generated from adjacent properties was not visible during the July 5, 2006 site inspection. However, as the Ponto Area presently supports a number of residential, commercial, and light industrial type uses, the potential for hazardous materials to be present on-site (or historically present on-site) is moderate. Such materials may be stored for use in containers or aboveground or underground storage tanks, utilized in operation or production, or physically present due to age of structures or former uses. The following describes hazardous materials identified on-site in the ESA.

Above Ground Storage Tanks (ASTs) and Underground Storage Tanks (USTs)

During the July 2006 site visit, plastic above ground storage tanks (ASTs), 5-gallon plastic containers, paints, solvents, cleaners, and oils were observed within the automobile repair/storage facilities. These ASTs were not visibly investigated for their content.

Available public records were reviewed on May 11, 2006 to determine the past or present existence of above ground storage tanks and underground storage tanks (USTs) on or near the Ponto Area. Two regulatory sites were reported within the boundaries of the Ponto Area. The regulatory sites were listed as the following:

 Ratan Ram S. (7204 Ponto Drive): This property was listed within the CHMIRS, San Diego Co. HMMD, and SWEEPS UST regulatory databases; refer to Appendix A of Appendix E for a detailed description of each regulatory database. The address 7204 Ponto Drive reported a release of unknown material on a vacant lot on June 29, 1988, with the incident reported to have been completed on June 29, 1988. This site is also a reported inactive HMMD facility. Seven reported USTs containing gasoline, diesel, and waste were removed. No violations were reported within the HMMD database. No contamination was reported in association with the removed on-site USTs. Although USTs were reported to have been removed, no official removal/closure letter was obtained.

• Coast Waste Management Inc. (7204 Ponto Drive): This property was listed within the RCRA-SQG, FINDS, and HIST UST regulatory databases. The address 7204 Ponto Drive is reported to be a small quantity generator. No violations were reported. Six historical USTs on-site are reported to have contained diesel and waste oil. This regulatory site was also reported in the FINDS database. No contamination was reported. Although USTs were reported to have been removed, no official removal/closure letter was obtained.

In addition, the County of San Diego Department of Health (DEH) maintains records for the address 7204 Ponto Drive (APNs 214-160-10, -11, -20, and -21; historically the Coast Waste Management facility). Records maintained for 7204 Ponto Drive were searched by RBF and included an application to remove five steel USTs (ranging in capacity from 1,000 to 8,000 gallons) containing an unknown material and two 550-gallon USTs. The current property owner did not use these USTs and was not aware of their presence. After removal on December 9, 1988, of the five USTs found to contain gasoline, diesel, and waste, and the two smaller 550-gallon USTs (contents unknown), all tanks were reported to be in good condition. No indication of soil or groundwater contamination was identified and the site was cleared for excavation and to be backfilled. No odors, ponding, groundwater contamination, or pipeline leaks were noted upon UST removal. All tanks were properly cleaned and disposed of; backfill material consisted of sand. Although the USTs were reported to be removed, no official removal/closure letter was obtained. The backfill material is reported to have no discoloration and no saturation.

Waste oil was also reported to be spilled by a cleaning truck at the 7204 Ponto Drive property on December 9, 1988; however, the soil was removed by excavation and the tank was manifested. A spill released lithium hydride to the soil on June 30, 1988. An excavation crew discovered a 3.5-gallon buried/dumped container and the contaminated soils were excavated.

A potential REC on the subject site caused by the above-referenced properties is considered to be moderate, due to the status of the identified sites (no official removal/closure letter was obtained); refer to Appendix E for a detailed discussion of files reviewed at the County of San Diego DEH for the on-site address 7204 Ponto Drive.

Twenty-five (25) regulatory sites were also listed in the EDR database within a one-mile radius of the Ponto Area; refer to Figure 5.4-1. A potential REC on the site caused by the above-described properties is considered to be low, due to the groundwater flow direction and distance from the Ponto Area, and/or the status of potentially hazardous sites identified in the ESA. For the complete EDR list, refer to Appendix A of Appendix E.

In addition, one area within the northern portion of the Ponto Area contained a concrete foundation with metal piping, which may have been associated with historic agricultural uses

on-site. Within other areas of the site, multiple unidentified metal pipes were noted extending out of the ground. The pipes appeared to be either capped or filled with soil; however, the terminus of the on-site pipes could not be determined during the July 2006 site visit. Such pipes that extend out of the ground surface may act as ventilation apparatus for USTs.

Chemical Storage and Use

Based on a review of available historical aerial photographs, on-site agricultural uses appear to be present during the 1950's and 1960's. A combination of several commonly used pesticides (i.e., DDD, DDT, DDE), which are now banned, may have been used previously on the Ponto Area. The historical use of agricultural pesticides has the potential to result in pesticide residues in on-site soils at concentrations that are considered to be hazardous, according to established Federal regulatory levels. Historical pesticide residues may represent a human health risk from inadvertent ingestion of contaminated soil, particularly by children.

As mentioned previously, plastic ASTs, 5-gallon plastic containers, paints, solvents, cleaners, and oils were observed as being stored on-site during the July 2006 site visit. These ASTs were not visibly investigated for their content.

Although access was restricted in various portions of the Ponto Area, stained soils, asphalt, and concrete were noted throughout the developed portions of the site during the July 5, 2006 inspection. Surficial staining was primarily noted within the auto maintenance/storage areas and surrounding machinery associated with the light industrial activities on-site. A sheet metal wood shop and heating/air conditional light industrial use exist on-site. Staining on the concrete was visible in association with on-site machinery, and fume hoods were also visible. The on-site stained soils, asphalt, and concrete are considered to be potential RECs, as the vertical extent of contamination remains undefined and could potentially affect groundwater quality.

Multiple large metal storage units are located throughout the Ponto Area. No visible staining was associated with the on-site metal storage units. One metal storage unit had three ventilation pipes extending out of the top of the unit; however, the interior of the metal storage units was not examined.

Historically, uses within the Ponto Area included, but were not limited to, metal shops, paint shops, antique repair, and mirror reconditioning facilities, dipping and stripping operations of materials, auto repair, metal fabrications, agricultural activities, and the Southern California Railroad (SCRR). The Coast Waste Management facility was historically located at 7204 Ponto Drive. Past activities associated with creosote dipping operations for railroad ties and railroad uses were also located on-site. A shipping depot for farm products (up to 1975), flower shipping operations, and repair/heavy equipment yards and outside warehousing were reported. Therefore, past and present activities on-site have resulted in chemical storage and use within the Ponto Area.

Asbestos and Lead Based Paint

Asbestos was used in many commercial products prior to the 1940's and up until the early 1970's. If inhaled, asbestos fibers can result in serious health problems. Based on the year (prior to 1978) the existing on-site structures were built, the potential for asbestos containing materials (ACMs) to be found is considered likely.

It is estimated that over 80 percent of all housing built prior to 1978 contains some lead based paint (LBP). In 1978, the U.S. Consumer Product Safety Commission (CPSC) phased out the sale and distribution of residential paint containing lead. In poor condition (flaking or pealing), LBPs can create a potential health hazard, especially in children. Based on the year (prior to 1978) the on-site structures were built, the potential for LBPs to be found on-site is considered likely.

Trash and Debris

Miscellaneous debris (i.e., wood, concrete, 55-gallon drums, miscellaneous household debris, automobiles, scrap metal, construction equipment, paint cans, batteries, and plastic and metal piping, etc.) was noted throughout the Ponto Area during the July 2006 site survey. Although no land-filling operations were noted, several waste/debris piles were noted within on-site properties that maintained construction equipment and provided auto/metal fabrication services. Stockpiled construction equipment (i.e., paving equipment, construction related tractors and autos), scrap metal (55-gallon drums, miscellaneous equipment, piping), and typical waste debris that contained wood, plastic, and concrete materials, as well as storage of oils, paints, solvents, and lubricants were observed. All of the waste piles observed during site inspection appeared to be on bare soils, gravel, concrete, or asphalt. Multiple on-site soil/dirt piles were also observed.

Other Hazardous Materials

PCBs. Pole mounted transformers and an automobile service/storage use were noted on-site during the site inspection. Many transformers and other materials (such as hydraulic lifts and associated fluids) contain PCBs. The use of PCBs was banned in 1977 and most production/use in 1979. No evidence of di-electric fluid or staining was noted on-site during the July 5, 2006 site survey. Although automobile service uses exist on-site, no hydraulic lifts were visible. The actual presence of PCBs associated with on-site transformers, nor within the automobile shop, could not be confirmed during the course of the site assessment.

Utility Structures, Roads, Disposal Systems, Water Wells. A high-pressure gas line traversing the Ponto Area was identified through signage. On-site roadways include Avenida Encinas (improved), Ponto Road (improved), and an unnamed roadway (unimproved). Based on interviews with current property owners, the Ponto Area is not connected to sewer and structures on-site may have associated septic tanks. As residential septic systems are possible receivers of household waste, they can represent a potential source for soil and groundwater contamination. No water wells were observed on-site.

Electromagnetic Fields (EMFs). Utilities (overhead power lines with transformers) were noted within the boundaries of the Ponto Area during the site inspection. Electromagnetic fields may cause risk to human health, although actual risk levels have not yet been established.

Radon. Radon is a radioactive gas found in certain geologic environments and is formed by the natural breakdown of radium, found in the Earth's crust. Radon is an invisible, odorless, inert gas that emits alpha particles, known to cause lung cancer. Radon levels are highest in basements (areas in close proximity to the soil) that are poorly ventilated. A radon survey was not included within the scope of this investigation. According to the "U.S. EPA Map of Radon Zones," the County of San Diego is located within Zone 3, which has a predicted

average indoor screening level of <2.0 Picocuries per liter (pCi/L). EPA recommends remedial action when radon levels are greater than 4.0 pCi/L. As such, hazards represented by exposure to radon within the Ponto Area are considered to be low.

5.4.1.3 Schools

The Ponto Area is located approximately 2.3 miles from the nearest public school. The Aviara Oaks Elementary School and the Aviara Oaks Middle School are located to the east of the project site at 6900 Ambrosia Lane, just off of Aviara Parkway.

5.4.1.4 McClellan-Palomar Airport Comprehensive Land Use Plan

The Ponto Area is located approximately 2.5 miles southwest of the McClellan-Palomar Airport (a public airport). The project site is not within the airport's Flight Activity Zone or Air Runway Protection Zone, as identified in the McClellan-Palomar Airport Comprehensive Land Use Plan (CLUP), and therefore is not subject to land use restrictions given in the Plan for these zones.

5.4.1.5 Emergency Plans

The City of Carlsbad Emergency Operation Plan (June 2003) provides guidelines for the City's response in addressing "extraordinary emergency situations such as natural disasters, human events, and technological incidents, including both peacetime and wartime nuclear defense operations" in order to protect life and property, and the well being of the population. The Ponto Area is not affected by the Plan as being identified as an area of shelter or potential area of refuge to serve the population in the event of an emergency.

5.4.1.6 Fire Hazard

Sanborn Maps contain detailed drawings indicating the location and use of structures on a given property during specific years. These maps were originally produced to show buildings in sufficient detail for insurance underwriters to evaluate fire risks and establish premiums, but now are utilized as a source of historical and environmental risk information. No Sanborn Maps were available for the Ponto Area or the immediate vicinity at the time of the ESA.

Although the majority of the Ponto Area remains as undeveloped land, the site is within a largely urbanized area, with residential development to the north and east and water bodies to the west and south. As the subject site is not considered to be in a wildland area due to its location within the City, the potential for wildfire to affect the site is considered to be low.

5.4.2 Thresholds for Determining Significance

The following thresholds for determining significance are based on Appendix G of the CEQA Guidelines. For the purpose of this EIR, a significant impact related to hazards or hazardous materials would occur if the proposed project would:

- Routinely transport, use or dispose of hazardous materials;
- Release hazardous materials into the environment;
- Be included on a list of hazardous materials sites;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located within an airport land use plan or within two miles of a public airport or public use airport;
- Be located within the vicinity of a private airstrip that would result in a safety hazard for people residing or working in the project area;
- Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or,
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

5.4.3 Environmental Impact

5.4.3.1 Hazardous Materials

Existing Hazardous Materials On-site

Impact HM-1 Regulatory lists identified two sites (at 7204 Ponto Drive) within the 50-acre Ponto Area. This address was identified on several regulatory lists as having hazardous materials on-site, including seven USTs. Although these tanks have reportedly been removed, no official removal/closure letter was obtained. As such, this site may represent the potential to release hazardous materials into the environment. This would be a significant impact and mitigation would be required.

The lists identified twenty-five regulatory sites located within a one-mile radius of the Ponto Area. A potential REC caused by these sites is considered to be low, due to the groundwater flow direction from the Ponto Area, distance from site, and/or the status of the sites identified in the ESA. Therefore, these sites are not anticipated to result in a hazardous condition for the Ponto Area. Impacts are considered to be less than significant.

Impact HM-2 Based on the year (prior to 1978) the on-site structures were built, the potential for ACMs to be found on-site is considered likely. Therefore, future development within the Ponto Area could potentially release hazardous materials into the environment. This would be considered a significant impact and mitigation would be required.

Impact HM-3 Similarly, based on the year (prior to 1978) the on-site structures were built, the potential for LBPs to be found on-site is considered likely. Therefore, the future development within the Ponto Area could potentially release hazardous materials into the environment. This would be considered a significant impact and mitigation would be required.

Transport, Use or Disposal of Hazardous Materials and Potential Accidents

The proposed project will ultimately result in development of a variety of future uses in the Ponto Area. Future land uses may require the transport, use or disposal of hazardous materials as an aspect of daily operation. Oil and/or other chemicals released from delivery vehicles or the vehicles of residents or visitors, as well as those used for mechanical equipment or for maintenance purposes, may be present on the site; however, the presence of

such materials on-site is not anticipated to be substantial in quantity or to pose substantial risk to human health or safety. The project is, therefore, not anticipated to represent a hazard due to the release of hazardous materials into the environment. Therefore, impacts related to the transport, use or disposal of hazardous materials are considered to be less than significant.

Other Hazardous Materials

Impact HM-4 During the on-site visit, miscellaneous debris piles that included concrete, 55-gallon drums, miscellaneous household debris, automobiles, scrap metal, construction equipment, paint cans, batteries, and plastic and metal piping were observed within the proposed development area. These debris piles can represent a potential hazard, as hazardous materials can seep into the soils below and contaminate underlying groundwater, thereby releasing hazardous materials into the environment. This would be a significant impact and mitigation would be required.

In addition, other hazardous materials may pose a potential hazard to future occupants of the Ponto Area. The Phase I ESA identified other potentially hazardous materials or conditions such as stained soils, unidentified pipes, on-site storage units, ASTs and unidentified soil/gravel piles. These conditions may be potentially hazardous and may represent the potential for release of hazardous materials into the environment. This would be considered a significant impact and mitigation would be required.

5.4.3.2 Schools

As stated above, the Ponto Area is located approximately 2.3 miles from the nearest public school. As such, the project would not emit hazardous emissions or result in the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, future development of the Ponto Area would not result in a safety hazard for school children in the Ponto Area. Impacts would be less than significant.

5.4.3.3 McClellan-Palomar Airport

The Ponto Area is located approximately 2.5 miles southwest of the McClellan-Palomar Airport (a public airport). The project site is not within the airport's Flight Activity Zone or Air Runway Protection Zone as identified in the McClellan-Palomar Airport Comprehensive Land Use Plan (CLUP). As such, the project would not be located within a vicinity of a private airstrip that would result in a safety hazard for people residing or working in the Ponto Area. Therefore, impacts would be less than significant.

5.4.3.4 Emergency Plans

The City of Carlsbad Emergency Operations Plan provides guidelines for the City's response in addressing "extraordinary emergency situations such as natural disasters, human events, and technological incidents, including both peacetime and wartime nuclear defense operations" in order to protect life and property, and the well-being of the population. The Ponto Area is not identified as a potential shelter or open space area of refuge within the Plan. Therefore, development of the project site would not impair the implementation of or physically interfere with the City's adopted emergency response plan. Therefore, impacts would be less than significant.

5.4.3.5 Fire Hazard

The Ponto Area lies within an urban setting and the surrounding area is largely built-out, with the Batiquitos Lagoon to the south and the Pacific Ocean to the west. As such, the threat for hazards to occur as the result of wildland fires is considered to be low. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Impacts would be less than significant.

5.4.4 Mitigation Measures

While there is no requirement that agricultural soil (associated with the historic agricultural uses) be tested prior to development, many developers and lenders throughout the United States are requiring that sites proposed for development undergo an evaluation of environmental conditions. The Phase I ESA concluded that, as individual ownerships are developed within the Ponto Area, the City of Carlsbad must determine if they wish to pursue additional environmental review (i.e., Phase II) to identify the absence or presence of pesticide residues, and if present, how these soils would be handled (i.e., Risk Assessment).

Based on the records and other data reviewed during the preparation of the Phase I ESA, the following mitigation measures are recommended. Implementation of the appropriate mitigation measures would be the responsibility of the individual property owners within the Ponto Area and would occur prior to any improvement activities on individual properties in the future.

Structures

HM-1 Prior to the commencement of demolition or renovation activities, the interior of individual on-site structures within the Ponto Area shall be visually inspected. Should hazardous materials be encountered with any on-site structure, the materials shall be tested and properly disposed of off-site in accordance with State and Federal regulatory requirements. Any stained soils or surfaces underneath the removed materials shall be sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required.

Asbestos Containing Materials

HM-2 Prior to the commencement of any remedial or demolition work, building owners shall contract with a certified professional to conduct an asbestos survey, consistent with National Emission Standards for Hazardous Air Pollutants (NESHAP) standards to determine the presence of ACMs. Demolition of or within existing buildings on individual parcels on-site must comply with State law, which requires a certified contractor where there is asbestos-related work involving 100 square feet of more of ACMs to ensure that certain procedures regarding the removal of asbestos are followed.

Lead Based Paints

HM-3 If, during demolition of any on-site structures on individual parcels, paint is separated from the building material (e.g., chemically or physically), the paint waste shall be evaluated independently from the building material to determine its proper management. According to the Department of Substances Control, if paint is not

removed from the building material during demolition (and is not chipping or peeling), the material could be disposed of as construction debris (a non-hazardous waste). It is recommended that the landfill operator be contacted in advance to determine any specific requirements for the disposal of lead-based paint materials.

Other Hazardous Materials

Miscellaneous Debris

HM-4 Prior to issuance of a grading permit, all miscellaneous debris (i.e., wood, concrete, 55-gallon drums, miscellaneous household debris, automobiles, scrap metal, construction equipment, paint cans, batteries, and plastic and metal piping, etc.) shall be removed off-site and properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

All light industrial equipment associated with hazardous materials storage, mixing, and/or use (i.e., fume-hoods, vents, piping, etc.) shall be properly disposed of in accordance with State and Federal regulations at an approved off-site landfill facility.

Septic Tanks

HM-5 Prior to the issuance of a grading permit, the specific location of on-site septic tanks shall be determined. Once located, septic tanks shall be removed and properly disposed of at an approved off-site landfill facility. Once the tanks are removed, a visual inspection of the areas beneath and around the removed tanks shall be performed. Any stained soils observed underneath the septic tanks shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

Documented USTs

HM-6 Prior to the issuance of a grading permit, the presence/absence of documented USTs located at the assigned address 7204 Ponto Drive shall be confirmed by a qualified Phase II/III hazardous materials consultant. Should a UST(s) be present, the UST(s) shall be removed and properly disposed of at an approved off-site landfill facility. Once removed, a visual inspection of the areas beneath and around the removed UST(s) shall be performed. Any stained soils observed shall be segregated and sampled. As a result of sampling (if necessary), the identified level of remediation shall be required.

Unidentified Pipes

HM-7 Prior to issuance of a grading permit, the terminus of all existing, unidentified metal pipes within an individual property shall be defined (as applicable). Should a UST be present in association with such pipes, the UST shall be removed and properly disposed of off-site at an approved landfill facility. Once the UST is removed, a visual inspection of the areas beneath and around the removed UST shall be performed. Any stained soils observed underneath the UST shall be sampled. As a result of sampling (if necessary), the identified level of remediation shall be required.

Pole-mounted Transformers

HM-8 Transformers and/or hydraulic lifts to be relocated during site construction/demolition shall be conducted under the supervision of the local utility purveyor to identify property-handling procedures regarding potential PCBs.

Stained Concrete/Asphalt

HM-9 Prior to issuance of a grading permit, any stained concrete/asphalt shall be removed and disposed of off-site at an appropriate permitted facility. Once removed, exposed soils shall be visually observed to confirm the presence/absence of staining (an indication of contamination migration into the subsurface). If observed, stained soils shall be segregated and tested to identify appropriate remedial activities if necessary which shall then be implemented.

Above Ground Storage Tanks

HM-10 Prior to issuance of a grading permit, on-site ASTs shall be removed and properly disposed of off-site at an approved landfill facility. Once the ASTs are removed, a visual inspection of the areas beneath and around the removed ASTs shall be performed. Stained soils observed underneath the ASTs shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

Unidentified Soil/Gravel Piles

HM-11 Prior to issuance of a grading permit, on-site soil/gravel piles shall be removed from each individual property and properly disposed of. Due to the unknown origin of the soil/gravel piles, the piles shall be sampled and tested for hazardous materials. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

High Pressure Gas Line

HM-12 Prior to any excavation within the Ponto Area, the exact location of the high-pressure gas line shall be defined prior to the commencement of construction. Any activities occurring within the gas line easement shall be conducted pursuant to applicable guidelines and regulations.

Storage Units

HM-13 Prior to demolition, the interior of the on-site storage units shall be visually inspected prior to removal. The storage units shall be removed and properly disposed of off-site at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

Concrete Foundation

HM-14 Prior to issuance of a grading permit, the affected owner shall remove the existing concrete foundation in the northern portion of the development area and properly

dispose of it at an approved off-site landfill facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

Soil Sampling

- **HM-15a** Prior to the issuance of a grading permit, where surficial staining is visible associated with the automobile and storage areas, soils shall be excavated to determine the exact vertical extent of the contamination (if any). If during soil removal, evidence of petroleum products appears to continue below the ground surface, sampling shall be performed to characterize the extent of contamination and identify appropriate remedial measures that shall be implemented.
- **HM-15b** If directed by the City, prior to issuance of a grading permit, individual landowners shall contract with a certified Phase II/III specialist to conduct soil sampling to identify any pesticide residues in the soil related to historic agricultural uses on-site. The sampling will determine if pesticide concentrations exceed established regulatory requirements and will identify proper handling procedures that shall be required.
- **HM-15c** Prior to issuance of a grading permit, construction in which the soil around the historic railway alignment is to be disturbed shall be conducted under the purview of the local regulatory agency to identify presence of gasoline, diesel, and/or creosote within the soils and to identify proper handling procedures. A visual inspection of the areas beneath and around the removed area shall be performed. Any stained soils observed underneath the adjacent area shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that shall be required.

Construction Activities

- **HM-16** If unknown wastes or suspect materials are discovered during construction on individual properties that are believed to involve hazardous waste/materials, the contractor shall:
 - Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
 - Notify the Project Engineer of the implementing Agency;
 - Secure the areas as directed by the Project Engineer; and,
 - Notify the implementing Agency's Hazardous Waste/Materials Coordinator.

5.4.5 Impact After Mitigation

Implementation of Mitigation Measures would reduce potential impacts related to hazards and hazardous materials to less than significant.

Figure 5.4-1 Phase I ESA - Overview Map

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